

Appl. No. : 08/779,457
Filed : January 7, 1997

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AMENDMENT TO THE CLAIMS

1. **(Currently Amended)** A method for identifying an agonist WSX receptor antibody with a strong binding affinity which decreases body weight or fat-depot weight or food intake in an obese animal, comprising the steps of
 - (a) producing one or more agonist antibodies which specifically bind to the extracellular domain of a receptor having a WSX motif comprising the extracellular domain sequence within SEQ ID NO:2, and
 - (b) selecting the an agonist antibody antibodies produced in step (a) which induce a statistically significant decrease in body weight or fat-depot weight or food intake in an obese animal binds to said extracellular domain with a Kd of no more than about 1×10^{-7} M
2. **(Currently Amended)** The method of claim 1 wherein said antibody decreases body weight or fat-depot weight or food intake in an ob/ob obese animal is an ob/ob mouse.
3. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) specifically bind to human receptor variant 13.2 (SEQ ID NO:2).
4. **(Currently Amended)** The method of claim 1 wherein said antibodies produced in step (a) bind to the extracellular domain of said receptor having a WSX motif with a Kd is of no more than about 1×10^{-4} M.
5. **(Previously Amended)** The method of claim 4 wherein said Kd is no more than about 1×10^{-7} M.
6. **(Previously Amended)** The method of claim 3 wherein said antibodies also bind to murine receptor having a WSX motif.
7. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) have an IC50 in a KIRA ELISA of about 0.5 μ g/ml or less.
8. **(Previously Amended)** The method of claim 7 wherein said antibodies have an IC50 in a KIRA ELISA of about 0.2 μ g/ml or less.
- 9 - 10 **(Previously Cancelled)**
11. **(Previously Amended)** The method of claim 1 wherein said antibodies bind to the epitope bound by an antibody selected from the group consisting of 2D7 (ATCC

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Accession Number HB-12249), 1G4 (ATCC Accession Number HB-12243), 1E11 (ATCC Accession Number HB-12248) and 1C11 (ATCC Accession Number HB-12250).

12. (Previously Amended) The method of claim 1 wherein said antibodies have complementarity determining region (CDR) residues from an antibody selected from the group consisting of 2D7 (ATCC Accession Number HB-12249), 1G4 (ATCC Accession Number HB-12243), 1E11 (ATCC Accession Number HB-12248) and 1C11 (ATCC Accession Number HB-12250).

13. -21. (Previously Withdrawn)

22. (Previously Amended) The method of claim 1 wherein at least one of said antibodies produced in step (a) comprises hypervariable region residues of clone 3 antibody (SEQ ID NO: 48).

23. - 24. (Previously Withdrawn)

25. (Previously Amended) The method of claim 1 wherein said antibodies produced in step (a) are monoclonal antibodies.

26. (Previously Amended) The method of claim 1 wherein at least one of said antibodies produced in step (a) is a human antibody.

27. (Previously Amended) The method of claim 1 wherein at least one of said antibodies produced in step (a) is a humanized antibody.

28. (Previously Amended) The method of claim 1 wherein at least one of said antibodies produced in step (a) is an antibody fragment.

29. (Previously Amended) The method of claim 28 wherein said antibody fragment is an $F(ab')_2$.

30-33 (Previously Withdrawn)